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End-of-Course Evaluation Form

PRE-COURSE CHECKLIST

- Physical surroundings; are they comfortable?
- Is the evacuation plan posted?
- Is the seating arrangement conducive to the type of interaction proposed in the lesson plan?
- Is the lesson plan current?
- Are the necessary supplies available?
- Are the training aids organized?
- Is the AV equipment operational?
- Is the instructor/classroom appearance appropriate?
- Are there enough handouts for scheduled activities?

ATTACHMENT 3

National Registry of Emergency Medical Technicians

6610 Busch Blvd.
P.O. Box 29233
Columbus, OH 43229

PURPOSE OF ESTABLISHMENT

This establishment is nationally recognized for certifying emergency medical technicians (EMTs). EMT candidates undergoing examination for certification will have completed a training program which included didactic instruction, clinical instruction, and supervised field internship.

Overall goals of this establishment are to promote and improve delivery of emergency medical services by assisting in development and evaluation of educational programs to train EMTs, establishing qualifications for eligibility for applying for certification, preparing and conducting examinations designed to ensure the competence of EMTs, establishing a system of recertification every two years, establishing procedures for revocation of certification for cause, and maintaining a national directory of registered EMTs.

Certification is dependent on competency according to recommended standards at three progressive levels. Of the three competency levels for which this establishment tests, the EMT\AMBULANCE is least intrusive. The second level, the EMT\INTERMEDIATE, requires more skill and competency than the EMT\AMBULANCE, yet not as much as the EMT\PARAMEDIC, the highest level. It is assumed the higher skill levels will encompass all lower skill levels. All EMTs work under the direct supervision of a physician.

Approximately 42,000 persons are examined per year for competency at the BASIC level. At the INTERMEDIATE and PARAMEDIC level, there are approximately 10,000 persons tested each year. Pass rate at the BASIC level is about 74%. Pass rates at the INTERMEDIATE and PARAMEDIC levels range from 68% to 71%.

PERSONNEL POLICIES

This establishment in its determination of adequate program guidelines and certification does not get involved in hiring of EMTs, thus personnel policies for this establishment will not be addresses.

EXAMINATION FOR CERTIFICATION

For the purpose of evaluation and subsequent certification, this establishment administers both written and practical examinations.

The written examination containing 150 questions, generally allows up to two and one half hours for completion. Written examinations are based on materials learned in the EMT/Paramedic training programs. Content is based on expected skill acquisition at the level for which the candidate is tested. For the EMT/Ambulance, content covers: patient handling and transportation, anatomy/physiology, patient assessment, breathing, resuscitation, cardiac arrest and cardiopulmonary resuscitation, soft tissue injuries, bleeding shock, pneumatic counter pressure device, medical emergencies, injuries to the head, face, neck, spine, chest, abdomen and genitals, fractures and dislocations, environmental emergencies, burns, hazardous materials, emergency childbirth, and psychological aspects of being an EMT.

The written examination for the EMT/Intermediate is composed of 150 multiple-choice questions covering all areas encompassed at the EMT/Ambulance level. In addition, roles and responsibilities, EMS systems, medical/legal considerations, medical terminology, EMS communications, patient assessment, airway management and ventilation, and the assessment and management of shock are covered.

The written examination for the EMT/Paramedic also contains 150 questions which cover all skill and knowledge expectancies of the two previous levels. It also assesses knowledge of the pre-hospital environment, preparatory, trauma, medical cardiology, OB/GYN, neonatal, and behavioral emergencies. All written examinations are controlled and monitored by designated examiners. All answers are recorded on answer sheets. Directions for test use are written on backs of test booklets and are provided orally at examination sites. All booklets must be returned at the end of the test. The written examination appears to be directly related to curriculum guidelines designed to accomplish competency at the various levels.

The practical part of the examination is set up to simulate actual emergency and life-threatening situations; it assesses skill acquisition in terms of knowledge of emergency procedures; one's ability to stay calm in stressful situations; one's ability to attend to minute, but important details; and, above all, one's ability to integrate information quickly, regarding a patient's condition, and prioritize as to what is the most effective treatment for each patient's unique needs. Participants in the practical examination are expected to demonstrate proper use of various equipment and techniques, to include the Kindrich Extrication Device using a life model; intravenous therapy using mannequins, and the use of defibrillation/cardiac monitoring equipment.

Participants are also required to respond orally in assessing trauma situations. Finger dexterity, with the ability to manipulate small items such as intravenous needles, is assessed by observation. The ability to read graphs, operate life-saving equipment, read medication dosages, determine dosages based on patient's weight, listen to breathing patterns, and the ability to see all associated activity are areas which are evaluated.

ENVIRONMENTAL CONDITIONS

In the analyst's opinion, the general environment conditions in which an EMT works could not be adequately assessed in an indoor evaluative environment. EMT/Paramedics in actual situations are exposed to a variety of hot and cold temperatures and may be, at times, exposed to hazardous fumes. They may be required to walk, climb, crawl, bend, pull, push, or lift and balance over less than ideal terrain. EMT/Paramedics are exposed to a variety of noise levels, which at times can be quite high, particularly when multiple sirens are sounding.

WORKER CHARACTERISTICS

EMT/Paramedics work as part of a team. Thorough knowledge of theoretical procedures and ability to integrate knowledge and performance into practical situation are critical. Self-confidence, emotional stability, good judgement, tolerance for high stress, and a pleasant personality are also essential characteristics of the successful EMT at any level. EMTs also must be able to deal with adverse social situations which include responding to calls in districts known to have high crime rates.

PHYSICAL DEMANDS

Aptitudes required for work of this nature are good physical stamina, endurance, and body condition which would not be adversely affected by having to lift, carry, and balance at times, in excess of 125 pounds (250, with assistance). EMT/Paramedics must be able to work twenty-four hour long shifts. Motor coordination is necessary because over uneven terrain, both the patients' and the EMT/Paramedics', as well as other workers, well-being must not be jeopardized.

COMMENTS

Driving the ambulance in a safe manner, accurately discerning street names through map reading, and the ability to correctly distinguish house numbers or business locations are essential to task completion in the most expedient manner possible. Use of the telephone for transmitting and responding to physician's advice is also essential. The ability to concisely and accurately describe orally to physicians and other concerned staff one's impression of patient's condition is critical as EMT/Paramedics work in emergency conditions in which there may be no time for deliberation. EMT/Paramedics must also be able to accurately summarize all data in the form of a written report. Verbal and reasoning skills are used more extensively than math. Math does play a part, however, in determining medication ratios per patient's body weight.

JOB ANALYSIS SCHEDULE

1. **ESTABLISH JOB TITLE:** Emergency Medical Technician (Medical Services)
EMT/Ambulance, EMT/Intermediate, EMT/Paramedic.
2. **INDIVIDUAL ASSIGNED:** Cathy Cain
3. **CODE 079026 WTA Group:** Occupations in medicine and health
4. **JOB SUMMARY:** Administers life support care to injured and sick persons in pre-hospital settings as authorized and directed by physician. Assesses nature and extent of injury or illness to establish and prioritize medical procedures to be followed.

5. **WORK PERFORMED RATINGS:**

Worker Functions	Data	People	Things
3 7 4			

Work Field: 930

M.P.S.M.S: 939 Medical and other health services. (Materials, Products, Subject Matter, and Services)

6. **WORKER TRAITS RATINGS:**

Scale: Level 6, highest level; level 1, lowest level.

G.E.D. 1 2 3 4 5 6

General Education Development

Overall Rating - Level 4

Reasoning development (R)

Level 4 - Apply principles of rational systems to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Interpret a variety of instructions furnished in written, oral, diagrammatic, or schedule form.

*NOTE: There appears to be components of level 5 in terms of dealing with several abstract and concrete cartable. There were not enough components to rate this as a level 5.

Mathematical development (M)

Level 3 - Compute discount, interest, profit, and loss; commission, markup, and selling price; ratio and proportion and percentage. Calculate surfaces, volumes, weights, and measures.

Language development (L)

Level 4 - Reading: Reads novels, poems, newspapers, periodicals, journals, manual, dictionaries, thesauruses, and encyclopedias.

Writing: Prepare business letters, expositions, summaries, and reports, using prescribed format and conforming to all rules of punctuation, grammar, diction, and style.

Speaking: Participate in panel discussions, dramatizations, and debates. Speak extemporaneously on a variety of subjects.

***NOTE:** In the analyst's opinion, the General Educational Development level appears to be an area in which skill levels could be separated, particularly the math. Precise reading of medications, however, is essential, i.e., Tylenol vs. Tegretol.

SVP: 1 2 3 4 5 6 7 8 9

Special Vocational Preparation (Time requirement)

Level 4 - Over three months and including six months (BASIC)

Level 5 - Over six months and including one year (INTERMEDIATE and PARAMEDIC).

Aptitudes: G 3 V 3 N 3 S 3 P 2 Q 2/3 K 2 F 1/2 M 2 E 2 C 1

Scale: Level 1, highest degree of particular aptitude; level 5, lowest degree of particular aptitude.

G - Intelligence

Level G-3:1 Renders general nursing care to patients in hospital, infirmary, sanitarium, or similar institutions:

Intelligence is required to learn and apply principles of anatomy, physiology, microbiology, nutrition, psychology, and patient care used in nursing; to make independent judgements in absence of doctor; and to determine methods and treatments to use when caring for patients with varying illnesses or injuries.

V - Verbal Aptitude

Level V-3:9 Questions patients to obtain their medical history, personal data and to determine if they are allergic to dental drugs or have any complicating illnesses.

Converses with patient in reassuring manner; explains post-operative care, oral hygiene, and importance of preventative dentistry to patients.

N - Numerical Aptitude (The ability to perform arithmetic operations quickly and accurately)

Level 3 - No illustrations in paramedic field.

Level N-3:2 Treats patients with disabilities, disorders, and injuries to relieve pain, develop or restore function, and maintain maximum performance, using physical means such as exercise, massage, heat, water, light, and electricity as prescribed by physician:

Numerical aptitude is required to interpret clinical tests such as range of motion, muscle response, and functional tests to ascertain extent of physical loss; to determine intensity and duration of manual or mechanical therapy treatment or procedures such as weight lifting, diathermy, traction, or electro-therapy.

S - Spatial Aptitude

Level S-3:1 Treats patients with disabilities, disorders, and injuries to relieve pain, develop or restore function, and maintain maximum performance, using physical means such as exercise, massage, heat, water, light, and electricity, as prescribed by doctor:

Spatial aptitude is required to visualize anatomic positions and the relationship between the point of forces and the area affected (as in traction); and to place treatment devices or administer manual treatment in relationship to the affected body part.

P - Form Perception

Level P-2:6 Diagnoses and treats diseases and disorders of animals. Ability to make visual comparisons and discriminations and see slight differences in shapes and shadings of figures and widths and lengths of lines. Form perception is required to perceive pertinent details of size, shape, and form in skeletal structure, organs, tissue, and specimens of various animals.

Q - Clerical Perception

Level Q-2:19 (for Paramedic and Intermediate) - Renders general nursing care to patients in hospital, infirmary, sanitarium, or similar institutions:

Notes pertinent detail in written instructions, especially amounts and strengths of medications to administer; accurately perceives numbers when reading instruments, preparing medications, and filling syringes for injections; accurately records data on patients' charts such as temperature, respiration, pulse count, blood pressure, medications and dosage administered.

Level Q-3:3 (for Basic) - Prepares and compiles records in hospital nursing unit, such as obstetrics, pediatrics, or surgery.

Clerical perception is required to post information to patients' charts from doctors' and nurses' notes and laboratory reports; to file charts in chart racks; to make up daily diet sheet for unit; and to maintain inventory of drugs and supplies.

K - Motor Coordination

K-2:5 Renders general nursing care to patients in hospital, infirmary, sanitarium, or similar institutions:

Coordinates vision and finger and hand movements to give injections with hypodermic needle, medication, position or remove dressings, and to measure medicines.

F - Finger Dexterity

F-1:2 (Intermediate and Paramedic) - Performs surgical operations upon human body:

Finger movements of one hand are required to locate broken or cut blood vessels, to position vessel and place ligature about it, and to tie one of several types of knots in ligature to stem flow of blood from vessel.

F-2:8 (Intermediate and Paramedic) - Performs chemical, microscopic, and bacteriological tests to provide data for use in treatment and diagnosis of disease:

Finger dexterity is required to use fingers to tie tourniquet about upper arm, locate vein below tourniquet near surface of skin; insert needle into vein; release tourniquet; and withdraw plunger of syringe to obtain amount of blood required for type of test to be performed.

No description for Basic, however, Level 2 is recommended due to ability to wrap bandages and apply splints.

M - Manual Dexterity

Level M-2:12 Renders general nursing care to patients in hospital, infirmary, sanitarium, or similar institution. Controls and extinguishes fires, protects life and property, and maintains equipment as volunteer or employee of city, township, or industrial plant. Manual dexterity is required during emergency situations, in positioning ladders and nets; clasping rungs to climb ladders; and in giving artificial respiration.

E - Eye-Hand-Foot Coordination

No description given. Level 2 recommended as job may require balancing of ladders, stairs, or on uneven terrain while carrying patient. Eye-Hand-Foot coordination required to permit ambulance operation and balancing, lifting, positioning, and transporting patient.

C - Color Discrimination

C-1:4 Performs surgery to correct deformities, repair injuries, prevent diseases, and to improve functions in patients:

Uses color discrimination and color memory in making diagnosis of patients' affliction or condition, by recognizing any deviations in color of diseases tissue from healthy tissue; evaluating color characteristics such as hue and saturation of affected body parts; and making determination as to extent or origin of condition.

Temperaments D F I J M P R S T V

- J - Adaptability to making generalizations, evaluations, or decisions based on sensory or judgmental criteria.
- M - Adaptability to making generalizations, judgements, or decisions based on measurable or verifiable criteria.
- P - Adaptability to dealing with people beyond giving and receiving instructions.
- S - Adaptability to performing under stress when confronted with emergency, critical, unusual, or dangerous situations; or in situations in which working speed and sustained attention are 'make or break' aspects of the job.
- T - Adaptability to situations requiring the precise attainment of set limits, tolerances, or standards.
- V - Adaptability to performing a variety of duties, often changing from one task to another of a different nature without loss of efficiency or composure.

Interests 1a 1b 2a 2b 3a 3b 4a 4b 5a 5b

- 2b - A preference for activities of a scientific and technical nature.
- 4b - A preference for working for the presumed good of the people.

Physical Demands S L M V 2 3 4 5 6

Explanation of terms:

1. Strengths
2. Climbing and/or balancing
3. Stooping, kneeling, crouching and/or crawling
4. Reaching, handling, and fingering and/or feeling
5. Talking and hearing
6. Seeing

Environmental Conditions I O B 2 3 4 5 6 7

Explanation of terms:

1. Work location (1 = Indoors, O = Outdoors, B = Both)
2. Extreme cold, with or without temperature changes
3. Extreme heat, with or without temperature changes
4. Wet and/or humid
5. Noise and/or vibration
6. Hazards
7. Atmospheric conditions

**U.S. DEPARTMENT OF LABOR
MANPOWER ADMINISTRATION**

Physical Demands and Environmental Conditions

ESTAB. JOB TITLE EMT-Paramedic ESTAB. & SCHED. NO.
DOT TITLE & CODE 079.010

Code: F = Frequently
 O = Occasionally
 NP = Not present

PHYSICAL DEMANDS

1. STRENGTH

- a. Standing 45 %
 Walking 50 %
 Sitting 5 %

- b. Lifting F
 Carrying F
 Pushing O
 Pulling O

COMMENTS

- 1a. Very little time is spent sitting down, except for incident report writing.
- 1b. EMTs are required to assist in lifting and carrying injured or sick persons to ambulance, removal from ambulance, and into emergency care setting.

- 2. **CLIMBING** F
 BALANCING F

COMMENTS

- 2. Climbing and balancing are required for safe transport of patient.

- | | | |
|----|------------------|---|
| 3. | STOOPING | F |
| | KNEELING | F |
| | CROUCHING | F |
| | CRAWLING | F |

COMMENTS

3. Patients are often found injured or sick in locations where removal is possible only through EMT's stooping, kneeling, crouching, or crawling.

- | | | |
|----|------------------|---|
| 4. | REACHING | F |
| | HANDLING | F |
| | FINGERING | F |
| | FEELING | F |

COMMENTS

4. Transporting life saving equipment, arm extension, handling carefully patients in fragile conditions, feeling to assess vital signs are part of the nature of this position.

- | | | |
|----|----------------|----|
| 5. | TALKING | |
| | Ordinary | F |
| | Other | NP |
| | HEARING | |
| | Ord. Conv. | F |
| | Other Sounds | F |

COMMENTS

5. Responding to patients, physicians, and co-workers through hearing is necessary in transmitting patient information and following directions.

- | | | |
|----|------------------|---|
| 6. | SEEING | |
| | Acuity, Near | F |
| | Acuity, Far | F |
| | Depth Perception | F |
| | Accommodation | F |
| | Color Vision | F |
| | Field of Vision | F |

COMMENTS

6. Sight is used to drive ambulances, distinguish landmarks, and visual inspection of patients.

RATINGS: S L M H VH 2 3 4 5 6

Analyst Cathy Cain Date 1/25/92 Estab. Reviewer
Reviewer Date Title Date

7. GENERAL EDUCATION: High School graduate or equivalent. Must be at least 18 years old.

8. VOCATIONAL PREPARATION:

- a. College: None, however, some EMT courses are taught at local colleges.
- b. Vocational Education Courses: For EMT/Ambulance - 110 hours specialized training. For EMT/Intermediate -90 -110 additional hours specialized training. For EMT/Paramedic - 750 - 1,000 additional hours specialized training.
- c. Apprenticeship: None
- d. Implant Training: None
- e. On-the-Job Training: During course of training, students will have engaged in various clinical experiences in supervised hospital and field settings. Amount of time spent varies.
- f. Performance on Other Jobs: None

9. EXPERIENCE: None

10. ORIENTATION: None

11. LICENSES, ETC.: Certification or Licensure

12. RELATION TO OTHER JOBS AND WORKERS:

Promotion: From EMT/Ambulance to EMT/Intermediate to EMT/Paramedic (based on training)

Transfers: None

Supervision Received: Physicians

Supervision Given: None

13. MACHINES, TOOLS, EQUIPMENT, AND WORK AIDS:

Ambulance, radio/telephone, extrication devices, cardiac monitors, defibrillator, electrocardiograph, intravenous tubing, injection needles, pneumatic ant-shock garments, stretchers, "jaws-of-life".

14. MATERIALS AND PRODUCTS: Intravenous fluids, bandaging tape.

ATTACHMENT 6

Examination Accommodations

Disability Policy

The National Registry of EMTs offers the following recommendations regarding the EMT program application process:

The National Registry of EMTs recommends that all applicants to EMT programs complete an aptitude test battery (e.g. General Aptitude Test Battery (GATB), Differential Aptitude Test (DAT) and a standardized achievement measure (e.g. Woodcock Johnson-Revised Tests of Achievement; Wide Range Achievement Test-Revised). Such measures assess many of the capacities and abilities necessary to competently perform the responsibilities of the EMT such as: general learning ability; verbal numerical and spatial ability; form and clerical perception; motor coordination; finger and manual dexterity; eye-hand-foot coordination; color discrimination. In instances where test barriers are not administered prior to admission to EMT training programs, NREMT recommends that such tests be administered at appropriate times as determined by state/training program policies. The National Registry also recommends that vocational counselors be available to applicants to interpret the results of the testing and provide guidance in terms of the advisability of proceeding with the EMT training program.

Eligibility for Accommodations for Registration Due to Disability

The National Registry of EMTs will offer reasonable and appropriate accommodations for the written component of the registration examination for those persons with documented disabilities.

I. Learning Disabilities

Those persons requesting accommodations for the written component of the registration examination must submit documented evidence of a learning disability prior to the examination. Based upon a thorough analysis of the written examination it has been determined that persons with learning disabilities manifested in the academic areas of reading decoding or reading comprehension may be eligible for special test accommodations. Other areas in which learning disabilities may be evidenced (e.g. mathematics calculations, mathematics applications, written expression, oral expression, listening comprehension) should not negatively impact upon one's performance on the written examination due to the format (multiple choice) and content.

Documentation of a specific learning disability must include one of the following:

1. Evidence of a previously documented learning disability which would negatively impact one's performance on the written examination, specifically in the reading areas (i.e. reading decoding or reading comprehension). Such documentation must include at least one of the following:

A. Diagnosis of a learning disability in the area of reading decoding and/or reading comprehension based upon the results of standardized psychoeducational assessment including an appropriate standardized measure of achievement in reading decoding and/or reading comprehension. A learning disability is defined as one of the following: 1) standard scores in reading decoding and or reading comprehension which are at least one standard deviation below the score obtained on the standardized test of intelligence; 2) evidence that an achievement ability discrepancy was not obtained due to some aspect of the learning disability such as a statistically significant abnormal discrepancy between Verbal and Performance abilities on the Wechsler Adult Intelligence Scale - Revised. Results of previous and currently valid psychoeducational evaluations will be accepted as evidence. However, if no such assessment has been conducted, then the applicant is responsible for obtaining such documentation before any decision can be made by the National Registry of EMTs regarding the applicant's request for special accommodations; 3) a statistically significant deficit in some area of cognitive processing which would impact one's ability to successfully complete the NREMT examination as written. Such cognitive processing deficits should be documented through appropriate standardized testing.

2. School and/or work records which demonstrate that special education services or accommodations were provided due to a learning disability in the area of reading decoding and/or reading comprehension. Appropriate documentation of the learning disability will also be required.

Requests for accommodations on the NREMT written examination will be reviewed by a panel of consultants on a case-by-case basis. Accommodations on the written examination will be considered for those persons who meet the minimum standards for performance as determined by analysis of the requirements of the job as documented by standardized assessment measures. Please contact the National Registry for further information regarding minimum standards for performance.

Types of Accommodations

The types of accommodations which may be requested by persons qualifying for special accommodations on the written examination due to documented learning disability are as follows:

National Registry of EMTs Policy and Procedures

1. The National Registry of EMTs will permit those persons who qualify for special accommodations on the written examination due to documented learning disability (as described above) to take the standard format of the examination but receive an extended amount of time in which to complete the examination. Applications selecting this option will normally receive 3.75 hours versus the standard 2.5 hours.
2. Other appropriate accommodations may be granted with appropriate documentation of disability as deemed appropriate by a panel of consultants.

Contextual (When, Where, Why)

The student will use this information throughout the course to enhance his understanding and provide direction for the EMT-Basic's relationship to the individual components of the EMS system. The lesson will provide the student with a road map for learning the skill and knowledge domains of the EMT-Basic. Additionally, this lesson will identify that not all students meet the mental and physical requirements of the career field. After completion of the course, the EMT-Basic will use this information to understand the process of gaining and maintaining certification, as well as understanding state and local legislation affecting the profession. This lesson sets the foundation for the remaining teaching/learning process. A positive, helpful attitude presented by the instructor is *essential* to assuring a positive, helpful attitude from the student.

STUDENT ACTIVITY

Auditory (Hear)

1. Students will hear specifically what they can expect to receive from the training program.
2. Students will hear the specific expectations of the training program.
3. Students will hear actual state and local legislation relative to EMS practice and certification.

Visual (See)

1. Students will see audio-visual aids or materials explaining the components of the health care system, EMT-Basic level of care, EMT-Basic's roles and responsibilities, professional attributes, and certification requirements.
2. Students will receive a copy of the cognitive, affective and psychomotor objectives for the entire curriculum.
3. Students will receive the final skill evaluation instruments.

Kinesthetic (Do)

1. Students will practice situations in which EMT-Basics portray professional attributes and experience ethical dilemmas.
2. Students will complete the necessary course paperwork.
3. Students will indicate if they will require/request assistance during the course or certification process based on the Americans with Disabilities Act. Additionally, students will provide the necessary documentation to support the requirements/request.

LAWS OF LEARNING: "THEY SAID..."

In scientific or educational terminology, an observation that has been so widely and frequently confirmed that it is universally accepted is called a "law." Below, you will find a list of the laws of learning. They are presented here as capsule reminders of what happens in the minds, hearts, and guts of learners during the learning process.

In teaching and learning, all things being equal:

- A. Learning will frequently be determined by biases the individual has. (Prior contradictory learning makes new learning much tougher and requires great patience on the part of the instructor while the student struggles with old concepts to which s/he has committed him/herself.) (Law of Mind-set)
- B. First impressions are vital and lasting. (Law of Primacy)
- C. Learning occurs best when the student is ready—physically, mentally and emotionally. (Law of Readiness)
- D. Students will tend to repeat behaviors which have pleasant consequences. (Law of Readiness)
- E. Up to a point, anxiety increases learning; beyond it is detrimental. This point varies from student to student and situation to situation. (Law of Anxiety)
- F. New learning occurs best when related to already known material (as long as the new and old information aren't contradictory). (Law of Intensity)
- G. Vivid, dramatic experiences are more likely to be remembered. (Law of Intensity)
- H. Retention is best when there is active involvement on the part of the learner. (Law of Exercise)
- I. The more times a thing is repeated, the more likely it is to be learned. (Practice makes perfect? Practice makes permanent. *Perfect* practice makes perfect!) (Law of Repetition)
- J. Forgetting is thought to be caused by interference—old knowledge destructively mingling with new knowledge. (Retroactive interference occurs when new learning interferes with the recall of old learning. Proactive interference is when old knowledge interferes with the recall of new knowledge. Interactive interference is when old and new knowledge interfere with the recall of intermediate knowledge. Reactive interference is the negative effects of attitudes or feelings on remembering.) (Laws of Interference)

DOT INSTRUCTOR TRAINING PILOT COURSE

PRE-REGISTRATION FORM

Course Preference (1 indicates first choice; 2 second): ☐ Gaston
☐ Rowan

If at all possible, we will get all students into their first choice for course location. If you only will consider taking the course at your first choice location, please mark only your first choice above.

Student Name:

Student Address:

Phone: Day: _____ Night: _____

Provider Affiliation:

Position Currently Held:

Provider Address:

Current Certification Level: ☐ EMT-A ☐ EMT-P
☐ EMT-D ☐ EMT-AI
☐ EMT-I ☐ Other: _____

Other Current Certifications: (PALS, ACLS, BTLs, etc.):

Please describe the number and types of courses you have taught in the past 3 years. Include the name of the agency(ies) for which you have taught.

Continued on Next Page

Have you had any courses in teaching methodologies before: ____ Yes ____ No

If yes, please give course title(s) and when and where you took it:

Sponsorship:

I (print name), _____ agree that the student submitting this pre-registration is an appropriate candidate for the DOT Instructor Training Program pilot being held October 12, 13, 14, 26, and 27, 1995 and recommend them for participation in this course.

Signature: _____

Title: _____

Agency: _____

Phone: _____

Please return the pre-registration form ASAP to:

Rebecca R. Yarbrough
Emergency Services Program Administrator
Centralina Council of Governments
Post Office Box 35008
Charlotte, NC 28235

GIVING INSTRUCTIONS

As instructors, we give the students in our courses tasks to accomplish, in the form of assignments, activities, and projects. In EMS instruction, those tasks often simulate on-the-job duties that the EMS student will perform. These guidelines for giving instructions apply to both situations.

1. **INTRODUCE THE TASK WITH A RATIONALE.** Explain from the learner's point of view, why the material they are about to learn is important to them. This explanation helps participants get ready to work.
2. **EXPLAIN THE TASK.** Describe the activity learners will participate in. The task description tells what they will do. For more difficult or complex tasks, you may need to provide a teaching aid, such as a checklist, overhead, or handout.
3. **SPECIFY THE CONDITIONS.** This helps learners accomplish the learning by defining the limits of the task. The context specifications tell them how they will do the work, e.g., as a team or individually. The conditions also specify what the outcome(s) will be and what constitutes successful completion.
4. **EXPLAIN HOW RESULTS WILL BE USED.** Tell the learner how the outcomes of this task relate to the overall goals that are being accomplished.

In the classroom, tell participants whether the results from a task should be reported back to the main group, used in another activity, processed within the small group, or are for individual reference.

DEMONSTRATION CHECKLIST

Preparation of the Trainee

- ☐ Put the learner at ease
- ☐ Covered the necessary background information
- ☐ Got him or her interested and willing to learn

Demonstration

- ☐ Procedure visible to all students
- ☐ Steps clearly identified and explained
- ☐ Stressed key points

Practice

- ☐ Had the learner explain key points
- ☐ Corrected errors
- ☐ Demonstrated competence in the use of corrective feedback
- ☐ Repeated instructions as necessary

Summary

- ☐ Summarized the main points of the lesson
- ☐ Asked for further questions

BEHAVIORAL TERMS FOR WRITING OBJECTIVES

Add	Distinguish	Produce
Analyze	Draw	Recall
Answer	Estimate	Recognize
Apply	Extrapolate	Reconstruct
Arrange	Generate	Reduce
Ask	Identify	Remove
Assemble	Illustrate	Revise
Assist	Indicate	Select
Bisect	Install	Share
Categorize	Interpolate	Show
Choose	Label	Solve
Classify	Locate	Sort
Compare	Manipulate	Specify
Compute	Match	State
Construct	Measure	Suggest
Convert	Name	Support
Criticize	Operate	Synthesize
Defend	Order	Tabulate
Define	Organize	Time
Demonstrate	Outline	Transfer
Design	Perform	Translate
Detect	Plan	Transmit
Develop	Predict	Validate
Diagram	Practice	Verbalize
Differentiate	Prepare	Verify
Discuss	Present	Weigh
		Write

ABCD...QUESTIONS TO ASK ABOUT YOUR OBJECTIVES

Audience

Have I specified for whom the objective is intended?

Yes

No

If no, who is the trainee? Specify the trainee in the objective.

Behavioral

Have I stated an observable behavior, which describes what the trainee will do (in the "real world") after instruction?

Yes

No

If no, what will the trainee do? Specify the behavior in the objective (see Handout 2 for help).

Conditions

Have I described the learning environment and tools which will be provided to the trainee in order to be able to perform the behavior?

Yes

No

If no, what equipment, tools, aids or references (if any) will the trainee be able to use? Are there other special conditions (e.g. outside, in the heat of fire, etc.) List those tools and conditions in the objective.

Degree

Have I stated the standards for measuring acceptable performance?

Yes

No

If no, what are the time limits, percentages/ranges of accuracy, number of correct responses, or other qualitative standards for performance? State them in the objective.

COURSE EVALUATION

PURPOSE: It is our objective to present a useful and effective training course. You are the final authority on whether that objective has been met. Your completion of this form, therefore, will play an important part in our future planning. Please do not feel bound to limit your remarks to questions on this form. Your comments on any aspect of the course will be appreciated.

Course		INSTRUCTOR TRAINING COURSE		Dates				
RESPONSES (Check the response closest to your opinion)				Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
1. Course material was	a. Well organized							
	b. Complete and appropriate							
	c. Readable (printed well)							
2. Audio visual materials were:	a. Related to the course							
	b. Good quality							
	c. Sufficient in number							
3. Course	a. Was a reasonable length							
	b. Was worth recommending to others							
	c. Contributed to my knowledge and skills							
	d. Accomplished announced purpose							
4. Instruction	a. Subject was thoroughly covered							
	b. Course objectives were clear							
	c. Exercises were appropriate							
	d. Time in class was spent effectively							
	e. Participation was encouraged							
5. Classroom	a. Was comfortable							
	b. Included a manageable number of students							
	c. Was appropriate for this course							
6. Instructor	a. Was prepared for class							
	b. Stimulated my interest in subject area							
	c. Made course a worthwhile learning experience							

Remarks

COURSE EVALUATION (Continued)

7. Overall instructor evaluation (Check your opinion)

- | | | | | |
|-----------------------------|------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| a. Knowledge of the subject | <input type="checkbox"/> excellent | <input type="checkbox"/> good | <input type="checkbox"/> fair | <input type="checkbox"/> poor |
| b. Ability to teach | <input type="checkbox"/> excellent | <input type="checkbox"/> good | <input type="checkbox"/> fair | <input type="checkbox"/> poor |
-

8. Would you add or emphasize any subject matter areas in subsequent course sessions?

- ☐ No ☐ Yes, list these areas and give your reasons.

9. Would you delete or de-emphasize any subject-matter areas?

- ☐ No ☐ Yes, list these areas and give your reasons.

10. Other comments. Please provide any comments, either general or specific, that you would like to make relative to this course.

Signature and Title	Organization	Date

EPINEPHRINE AUTO-INJECTOR

	Points Possible	Points Awarded
Takes or verbalizes body substance isolation	1	
Contacts medical direction for authorization	1	
Obtains patient's auto-injector	1	
Assures injector is prescribed for the patient	1	
Checks medication for expiration date	1	
Checks medication for cloudiness or discoloration	1	
Removes safety cap from the injector	1	
Selects appropriate injection site (thigh or shoulder)	1	
Pushes injector firmly against site	1	
Holds injector against site for a minimum of ten (10) seconds	1	
Properly discards auto-injector	1	
Verbalizes monitoring the patient while transporting	1	
TOTAL:	12	

CRITICAL CRITERIA:

- ___ Did not contact medical direction for authorization
- ___ did not check medication for prescription, cloudiness or discoloration
- ___ Did not use an appropriate injection site
- ___ Used the injector against the injection site for ten (10) seconds or longer
- ___ Did not discard auto-injector into appropriate container

INSTRUCTIONAL METHODS

METHOD	DEFINITION	BEST FOR:	ADVANTAGES	DISADVANTAGES	HOW TO
PRESENTATION FORMS					
Lecture	Instructor presents concepts and methods or demonstrates skills.	Presenting new material.	High instructor control Less time consuming	Limited opportunities for interaction Decreased retention.	<ol style="list-style-type: none"> 1. Keep it brief. 2. Enhance with visual aids. 3. Plan regular opportunities for interaction (including strategies below).
Reading Assignments	Trainees read material before or during class.	<p>Before Class-highly motivated trainees in familiar subject area.</p> <p>During Class-Brief items-anecdotes for discussion or background for exercises.</p>	<p>Before class - Allows trainees to learn material at their own pace. Covers pre-requisites.</p> <p>During-Avoids instructor read aloud and gives trainees point of reference during exercises.</p>	<p>Cannot ensure that material will be read prior to class. Perceived as burden by trainees.</p> <p>During Class-Can be time consuming. Low interactivity.</p>	<ol style="list-style-type: none"> 1. Choose before-class reading only when absolutely necessary. Enlist supervisor support and require written exercise to enhance memory. 2. Keep in-class reading brief and practice or discussion related. Check on comprehension (ask for summary) and allow enough time for trainees who read more slowly.

METHOD	DEFINITION	BEST FOR:	ADVANTAGES	DISADVANTAGES	HOW TO
DISCUSSION FORMS					
Structured Inquiry	Instructor asks questions or poses problems to guide the session.	Exploring implications of material presented or enhancing lecture.	Moderately interactive. Moderate instructor control. Allows trainees to "drive" presentation.	Frustrating if there is only one right answer or if trainees don't know answers. Participation concentrated among most confident trainees.	<ol style="list-style-type: none"> 1. Plan for questions as part of your presentation. 2. Choose questions that have more than one correct response (e.g. lists) and that trainees are likely to know (review, personal experience). 3. Mix approaches: allow trainees to think about and write down responses, group discussion and response, round robins (everybody answers in turn).
Discussion Whole Group and Small Group	Trainees address issues, ideas, applications, problems with questions or comments.	Solving problems, making decisions, encouraging group identity.	Highly interactive. Strengthens group identity. Fosters problem solving skills.	Participation concentrated among most confident trainees. Can be time consuming.	<ol style="list-style-type: none"> 1. Choose whole group for narrow discussion topic or for important issues for the whole group. 2. Choose small groups for broader discussion, emotionally charged issues, and tasks. 3. Keep the goal clear. 4. Resist the temptation to become a group member.

METHOD	DEFINITION	BEST FOR:	ADVANTAGES	DISADVANTAGES	HOW TO
DEMONSTRATION					
Demonstration	Instructor shows a process to be learned or the way something works	Presenting standard procedures and processes	High instructor control Applies learning Links instruction to applications	Time consuming Can be difficult to view with large groups	<ol style="list-style-type: none"> 1. Create a viewing area that is visible to all students 2. Clearly identify all steps and stress key points 3. Ask learners to reiterate key points 4. Have learners practice and correct errors
SIMULATION					
Role Plays Simulations	<p>Role play—Trainees act the parts of other people in a dramatized situation.</p> <p>Simulation—Trainees act as themselves in unfamiliar conditions or observe dramatized situations (as in videotape).</p>	Practicing unfamiliar behavior, linking concepts presented to real situations, or awareness of results of behavior.	Intensive participation. Fosters learning in the affective domain. Facilitates transfer of learning.	<p>Can be time-consuming.</p> <p>Not useful if students do not participate fully.</p>	<ol style="list-style-type: none"> 1. Give trainees a structure in the form of a case study or script and guidance in the form of modeling. 2. Process experience after role play, link to objectives and real-world situations.
Experiential Learning	Trainees reflect on experiences inside the training environment.	Thinking about or learning from group dynamics or behavior being modeled as in general class experience, team building exercise, simulation, or role play.	Highly interactive. Moderate instructor control. Classroom is model for trainees to use experimenting and discovering.	<p>Emotional content requires advanced facilitation skills.</p> <p>Risk of getting sidetracked.</p> <p>Can be time-consuming.</p>	<ol style="list-style-type: none"> 1. <u>Focus.</u> Know precisely what experiences trainees should reflect on and explain clearly how trainees should use the experiences. 2. Make sure learning is tied to objectives. 3. Be cautious of using emotionally charged experiences.

METHOD	DEFINITION	BEST FOR:	ADVANTAGES	DISADVANTAGES	HOW TO
Field Trips	Trainees visit a site for instructional purposes.	Giving trainees exposure to a real-world setting.	Links instruction to conditions where it will be applied.	Time consuming. Limited trainee participation. Risk of getting side-tracked.	<ol style="list-style-type: none"> 1. Explain how trip is related to instructional objectives. 2. Give trainees something to do or observe at the site. 3. Follow up after trip to reinforce.
COOPERATIVE LEARNING					
Brainstorming	Group generates ideas without judging in a timed environment.	Stimulating new ideas. Enhancing creativity.	Active participation. Easy to prepare. Encourages ownership of problem and solutions.	May confuse and frustrate if ideas are not used later.	<ol style="list-style-type: none"> 1. Instruct students to withhold judgment 2. Instruct students that quantity and variety are the goals, not quality. 3. Describe up front how ideas will be used and that not all ideas can be used.
Team Development	A formal attempt to improve the interaction of existing work groups	Building teamwork Increasing cooperation Decreasing destructive conflict	Addressees obstacles to new behavior Encourages application, results	Time-consuming Resistance/emotions may be high Must be followed up	<ol style="list-style-type: none"> 1. Assess readiness of group for change. 2. Build and maintain support for effort. 3. Help team focus on communication and purpose of the group. 4. Require projects requiring team work, reflect using experiential learning. 5. Get commitment, action plans.

METHOD	DEFINITION	BEST FOR:	ADVANTAGES	DISADVANTAGES	HOW TO
Small group projects	Structured, defined goal that must be accomplished through group effort	Clearly defined, product-oriented, multi-faceted learning, such as a report, model, or presentation	Increases collaborative learning Draws on diverse experience and expertise of group Fosters sense of accomplishment	Participation can be concentrated among most confident members Can be time-consuming	1. Clearly define desired outcomes 2. Help the group focus, develop specific goals, and determine milestones
PROBLEM SOLVING					
Case Studies and Critical Incidents	Case Study-Develops and distributes a written description of a problem or situation. A critical incident is similar but very brief.	Simulating reality or experience so that trainees can apply instruction.	Intense participation. Applies learning. Stimulates thought. Improves problem-solving skills	Case studies-can be time-consuming, can be difficult to write. Critical incidents-lack of detail can lead to extended explanations, result in wide variety of responses.	1. Rely on people with experience in the area for realistic cases, key components of success or failure, and for review for accuracy. 2. Link case or incident closely to instructional objectives.
Games	Structured situation involving competition between two or more people or groups.	Competition motivates trainees. Cooperation builds group identity, team problem solving skills, awareness of dynamics.	High trainee participation. Increases appeal of "dry" material (as in material reviewed during a game show quiz).	Can be time-consuming out of proportion to objective's importance. Can be time-consuming to develop.	1. Estimate time for game carefully, weight its value in supporting objective and the value of the objective. 2. Rely on concepts from familiar games. Consult books designed for use by trainers (e.g. "Games Trainers Play")
In-Basket Exercises	A timed case study or simulation, in which individuals are given an in-basket containing written memos, letters, or messages and are asked to take action.	Evaluates problem-solving, decision making skills. Evaluates time management.	Requires active participation. Limited instructor role.	Can be time-consuming, costly and difficult to develop. Learning curve for students who are not familiar with this type of exercise.	1. Collect real life examples (modified to protect privacy if necessary). 2. Give clear, specific instructions. Allow students to work on brief example.

METHOD	DEFINITION	BEST FOR:	ADVANTAGES	DISADVANTAGES	HOW TO
TUTORIAL					
Computer-Assisted Instruction	Instruction assisted by a computer	Conveying information Individualized instruction	Trainees work at their own pace Trainees at different sites can be trained without travel Trainees spend less classroom time, presentation and practice individually	Expensive Time-consuming to develop properly	Evaluate costs and benefits of choice carefully. Use full capabilities; avoid mimicking structure of traditional stand-up instruction. Make visually appealing.
One-on-one Instruction	Student is individually assisted by the instructor	Individualized instruction Remediation Guided practice	Trainees can learn at their own pace Individual areas of difficulty can be dealt with very effectively	Expensive Time-consuming	Use on an as needed basis Maintain guidelines about when, where, and how long Avoid favoritism Avoid compromising situations

SAMPLE ACTION PLAN

The three most important things I learned in this course were:

- _____
- _____
- _____

People, things, and processes that will support me as I use my new skills
(implementing new processes, applying new concepts):

People, things, and processes that may be obstacles to my using my new skills
(implementing these new processes, applying these new concepts):

When I return to work, I will:

- ___ Schedule a meeting with my supervisor to discuss what I learned in this course.
- ___ Share my course materials with my supervisor.
- ___ Share my course materials with co-workers whose support I need.
- ___ Schedule an hour to review the course materials one month from today.
- ___ Schedule an hour to review this action plan three months from today and address any new unforeseen obstacles.

Other things that I can do to directly address obstacles to using what I have learned in this course:

PREPARING TO TEACH

1. **Know the scope of the course.** Know what is covered and what is not. If you get questions outside the scope of the course, you will usually want to discuss them outside class to keep from losing uninterested class members.
2. **Know the depth of the course.** Know to what level of complexity each topic is developed. You want to be sure you are prepared to go into the appropriate amount of depth in your lecture and examples.
3. **Know the flow of the presentation.** You want to appear prepared and avoid getting into a side discussion now of a topic that is going to come up later when it will make more sense.
4. **Know the purpose of all the visuals.** Never say "I don't know what the person who designed this had in mind, but..."
5. **Estimate the timing** of each lecture, exercise or workshop.
6. **Work through each exercise** so it is fresh in your mind when you present it to the class and so you can be sure the solutions are correct. It is much easier to supervise an exercise in class when you know just what the participants are encountering.
7. **Do all the exercises.** This will help you to be sure everything will work in the environment where you are teaching, and so the details will be fresh in your mind.
8. **Anticipate questions, technical difficulties.**
9. **Make sure that the Instructor Guide matches the Participant Manual.**

MINI-PRESENTATION CHECKLIST

Presenter: _____

Subject: _____

Introduction

- ___ Drew in the audience
- ___ Covered background information, if necessary

Body of Presentation

- ___ Made eye contact
- ___ Maintained open posture
- ___ Used movement and gestures appropriately
- ___ Spoke in understandable, clear tones
- ___ Delivery was poised and suited the topic
- ___ Material was logically organized
- ___ Stressed key points

Summary

- ___ Summation and closure were effective

What were this presenter's strengths?

Where might this presenter improve?

TRAINING MEDIA REFERENCE

Printed Materials

Let's look at two categories of printed materials: references and activity handouts.

References. Reference materials include instructor-provided *supplemental readings*. These can be distributed either prior to or during class. It is important to remember that as an instructor, you should choose reference materials that are directly relevant to information covered in class. Providing a frame of reference and/or highlighting specific learning outcome to be gained from the supplemental reading is critical.

Job Aids are designed to make required information easily accessible on the job. Job aids are particularly helpful as reminders for information or processes needed on a sporadic basis.

Activity Handouts. A wide variety of printed materials can be used to support classroom activities and enhance learning. *Case studies* are handed out as part of an exercise, and contain a synopsis of information used as the basis for a decision or analysis activity. *Study guides* direct students to important topics or provide needed information.

Checklists can be used during activities to provide students with criteria for evaluation. For example, during a practical exercise, students can be required to perform a specific task under the same conditions as a final test. A checklist can be provided detailing each step and performance standards. For this course, instructor trainees will use a checklist for preparing to instruct during their lesson presentations.

Graphic Elements. Pictures or graphics should directly pertain to the text they illustrate and, as stated, should be placed as near the related text as possible. Visuals should enhance understanding by communicating more effectively than words allow, such as a set of scales to describe the concept of "balance." If a concept could be best conveyed with a chart or graph, determine essential information, and note relationships between the parts. Keep visuals simple to avoid confusing your message, and direct attention to them with concise captions or questions in the text.

Text Elements. The most legible typefaces are sans serif styles. The size of the lettering is crucial when designing displays to be read from a distance. A common rule of thumb is to make lowercase letters one-half of an inch high for every ten feet. Instructors should take into account the projection factor for overhead transparencies or slides, and design accordingly.

Presentation aids

Transparencies. Transparencies are probably the most widely-used teaching aid. They can be used to project either pictures or words, and are very effective for highlighting the main points of your lecture. They are usually easy for everyone to see, and they may be used without dimming the lights.

When designing transparencies, refer to lesson objectives and determine the most important content in order to target elements that should be emphasized. Decide exactly what the verbal message must communicate and try to be as concise as possible, yet still be understood. Avoid unnecessary "bells and whistles" such as three dimensional effects, especially if they make the material harder to read. Use lines and boxes to organize and divide the screen. A design element, such as a particular border or icon, or certain color combinations, used repetitively on successive transparencies/slides, creates unity and adds polish to the entire presentation.

Instructors should be aware of how long it will take an average viewer, unfamiliar with the content, to read the entire visual, and display it accordingly. Another option is to provide students with the visual in their printed materials.

Charts/posters. Charts/Posters are usually used to present complicated diagrams, to highlight a few main points, or to motivate and persuade. They are readily made, or procured, and can be displayed indefinitely, allowing students easy access for as long and often as necessary. Because charts and posters can be displayed indefinitely, their content can be more complex than the screen design for transparencies. For example, a labelled rendering of the human heart could be posted in the classroom.

Posters are often used to motivate and persuade. The use of asymmetrical arrangements, bold colors, eye-catching, simple pictures and straightforward text is most effective.

Unfortunately, charts and posters can become outdated or lose impact; therefore, this medium is particularly useful to present stable material.

Slides (35 mm). Slides (35 mm) can be used like transparencies to project either words or pictures, and produce excellent results with full color photographs. They require less actions to use than transparencies, since the projector does all the work. One disadvantage is that the lights must be dimmed.

Flipcharts. Flipcharts are included under prepared and spontaneous media because flipchart pages can be used either way, or in combination. One disadvantage of flipchart use is that the instructor must turn away from the class while writing. However, prior to class, the instructor can fill in major headings, draw boxes for a simple flow chart, or write out a sentence, leaving blanks. Later, during class, he/she can label the steps in the flow chart or fill in the blanks based on student input.

Presentation aids (cont'd)

Film/video. Films which are brief and pertinent to the subject matter provide a pleasant change of pace for the class. A significant drawback is the "prepackaged" nature of films. The content may not entirely dovetail with course concepts. Additionally, the lights must be dimmed and, if the film is lengthy, the audience may tend to lose energy, or even to fall asleep. Availability, cost, and use of equipment are also considerations.

Simulation/props. For practical exercises, props are an essential learning tool. Equipment that allows the students to experience, as closely as possible, actual on-the-job conditions is ideal. the use of props is especially appropriate for EMS instruction. Emergency Medical Technicians (EMTs) use many different pieces of equipment on the job. When students practice on actual or simulated equipment, mastery of skills increases. As an instructor, allow time for your students to practice with props.

Computer-based programs. Computer programs can be used to create screens for display, much like transparencies. Graphics, such as pie- and flow- charts, and the text and graphic elements common to transparencies can be easily created at a keyboard, stored as files, and then displayed to larger screens. Full color photographs can be scanned in, digitized, and stored as files, as well.

Presentation software. Software packages enable instructors to quickly and easily compile text, graphics, and pictures into an on-line presentation. Transitional devices, such as screen wipes, pushes, and fades, add sophisticated touches that enhance delivery. These presentations can be displayed on computers or through LCD display panels.

LCD display panel. An LCD display uses an overhead projector and an *LCD display panel* which connects to a computer. You show your presentation, which consists of electronic files instead of transparencies, via the computer. It is transmitted through the LCD display and projected in color. Digital files facilitate the rapid updating and reordering of material, and they can be transmitted electronically to remote locations. Digital images can be converted into a variety of forms, including hard copy, video, and CD-ROM, in addition to being pulled into a graphic or document file. However, this medium requires skills that may need to be trained or outsourced.

HOW TO DESIGN TRANSPARENCIES

- Horizontal formats fit the size of the projected area best.
- Visual ideas should be communicated with pictures whenever possible. Use diagrams, charts, graphs, and pictures. If you have difficulty incorporating the picture and text, consider projecting just the picture, and using the board or flipchart to convey text.
- Confine your message to a single concept and use a simple, uncluttered design.
- A good rule of thumb is six words per line and six lines per transparency.
- Use key words as headlines to help the audience remember each point.
- Use letters at least 3/16-inch high. Check readability by laying the transparency on a white piece of paper on the floor. If you can read it from a standing position, the audience should be able to read it when projected.

TIPS FOR OVERHEAD PROJECTION

- Use the same size frame for all of your transparencies.
- Tape a guide on the projector platform so that each image projects onto the same screen area
- Switch off the projector when you have finished referring to a particular transparency. This will shift the audience's attention back to you.
- Review the transparencies before the lesson to ensure they are in order and none are missing.
- Store transparencies in three-hole punch slip covers, in order, in a three-ring binder. Then just open the binder on the table next to the projector for easy access.
- Plan ways to add meaningful details to the transparency during projection. This adds spontaneity to the presentation.
- Reveal information one line at a time by placing a sheet of paper under the transparency.
- To present a complex idea in stages, layer up to four transparencies, one at a time.
- Lay pointers directly onto the transparencies. Any elevation will put the pointer out of focus and any slight hand movement will be greatly exaggerated on the screen.

HOW TO OPERATE AN LCD PANEL

Instructions for Set Up

- Position personal computer and overhead projector on the same study table of projection cart, or on adjacent tables or carts
- Place LCD panel on the overhead projector stage
- Be sure the power switch on the LCD panel is set in the OFF position
- Plug a power supply into the LCD panel and electrical outlet
- Connect computer to LCD panel. (see LCD panel instruction manual for specifics; the connection may require special cords)

Operation

- Turn LCD power switch on
- Adjust LCD panel for best image
- Focus overhead projector on the projection screen
- Whatever appears on the computer monitor can now be projected onto the screen
- Although you can write on the LCD panel with water-based markers, covering it with clear acetate will protect the unit

SUCCESSFUL SLIDE PRESENTATIONS

- Make certain your slides are in sequential order and right side up. Here's how:
 - Arrange in order and number sequentially.
 - Take the slides and hold it as it will be seen on the screen: right side up with the letters running left to right.
 - Place a spot (or number) on the bottom left corner.
 - This spot is referred to as the thumb spot. When you place the slide in the projector (upside down), your thumb will be on top of the spot.
- Use words on title frames to cue your audience to upcoming subject matter.
- Prepare in advance to illuminate your notes after the room lights are dimmed, if necessary.
- Limit verbal commentary to less than a minute, unless the visual is complex.
- Prepare a gray or black slide as a placeholder for lecture portions during your presentation, rather than holding an irrelevant slide on the screen.
- Consider including music to create a mood and capture attention.
- Begin and end with a black slide.
- Use a remote control device to advance slides. This allows you to stand to the side, maintain some eye contact with the audience, and keep an eye on the slides.

TIPS FOR VIDEO AND FILM PRESENTATIONS

- Check the lighting, seating, and volume control to be sure that everyone can see and hear the presentation.
- Prepare students by briefly reviewing the lesson objectives related to the topic of the presentation.
- List the main points on the board before you start.
- Highlight major points after the presentation by adding them to the list.
- Remember that a smaller, brighter image is better than a large dim one. Move the projector closer to the screen or cover the windows with paper if necessary.
- Cue up the film or video so that the first image the audience sees is the title of opening scene.

TROUBLESHOOTING

EQUIPMENT	PROBLEM	POSSIBLE CORRECTION
Overhead Projector	No light after flipping switch	<ol style="list-style-type: none"> 1. Be sure projector is plugged into an electrical outlet 2. Turn the switch all the way on. Many overheads have a three-position switch: on, off, and fan. 3. If lamp is burned out, switch to spare lamp within projector if it has this feature. Otherwise, you will need to replace the lamp. Be sure to use a lamp of the same wattage (too high a wattage can cause overheating). Do not handle the lamp while it is hot. Avoid touching the new lamp with bare fingers; this could shorten its life. 4. Switch may be defective. If so, replace it.
	Dark edge with light in center of image	The fresnel lens is upside down. Turn it over if you know how; if not, have a qualified specialist do it.
	Dark spot on area of screen	The lamp socket within the projector needs adjustment. The task is best done by a trained audiovisual technician.
	Dark spot on screen or failure of lens to focus despite all adjustments of focus control	After determining that it is not simply a matter of dirt on the lens or improper use of the focus control, check for a warped fresnel lens. This lens is plastic and can become warped from excessive heat, usually caused by the fan not running properly. Have a qualified specialist repair the fan or thermostat and replace the fresnel lens.

EQUIPMENT	PROBLEM	POSSIBLE CORRECTION
LCD Panel	No image on LCD panel	<ol style="list-style-type: none"> 1. Adjust contrast 2. Check computer for instructions on obtaining image
	Image appears but is not centered	<ol style="list-style-type: none"> 1. Check LCD panel instructions 2. Adjust centering or frequency
	Flickering image or missing lines on LCD panel	<ol style="list-style-type: none"> 1. Check all connections to be sure they are correct and secure 2. Adjust stability or frequency
	Intermittent appearance of image	<ol style="list-style-type: none"> 1. Check all connection to be sure they are correct and secure 2. Check equipment setup
	Rolling waves in image	<ol style="list-style-type: none"> 1. Check equipment setup 2. Try another overhead projector 3. Adjust stability or frequency
	Contrast of display panel not uniform	<ol style="list-style-type: none"> 1. Focus overhead projector 2. Adjust contrast 3. Use lower-wattage overhead projector
	Test pattern only	<ol style="list-style-type: none"> 1. Check all connections to be sure they are correct and secure 2. Refer to instructions to be certain computer is connected properly

EQUIPMENT	PROBLEM	POSSIBLE CORRECTION
Slide Projector	Can't find power cord	Look for a built-in storage compartment
	No power after plugging in	If you are sure the outlet is live, check the circuit breaker on the slide projector
	Fan runs but lamp does not light	Some projectors have separate switches for "Lamp" and "Fan" or a two-stage switch for these two functions. Make sure all switches are properly set. Then check for burned out lamp. If neither of these is the problem, have technician check out the projector.
	Image not level	Most slide projectors have an adjustment knob on one of the rear feet. Use the knob to raise or lower the slide.
	Slide is distorted	The lenses may be out of alignment or broken. Often they can be adjusted easily by aligning them correctly in their slots.
	Slide mounts begin to warp	For plastic black-and-white mounts, check to see that white side of mount is facing the lamp. If the dark side is facing the lamp, a buildup of heat can cause the mount to warp (or even melt).
	Slide image upside down or backwards	Remove the slide and reverse it.
	Slide jams in gate	<ol style="list-style-type: none"> 1. Manually remove the slide. 2. Jamming can be avoided by not placing bent slides in the tray. Plastic mounts have a tendency to warp; cardboard mounts fray; glass mounts may be too thick for the slide compartment of the tray. For this reason, jamming is more likely to occur with narrow slide compartments.

SAMPLE LESSONS

EVOC: Legal Aspects of Ambulance Operation

EMT-BASIC: Initial Assessment

COURSE: EMERGENCY VEHICLE OPERATOR COURSE
(AMBULANCE): NATIONAL STANDARD CURRICULUM

MODULE A: Ambulance Operation: The Basics

LESSON 2: Legal Aspects of Ambulance Operation

LENGTH: 1.5 Hours

COURSE GOAL: To provide ambulance operators with the knowledge and skills to operate their vehicles so that their vehicle, equipment, crew, and patients will be delivered safely and efficiently and the safety of the public will be assured during all phases of the delivery of Emergency Medical Services (EMS) involving the ambulance





MODULE GOAL: To provide ambulance operators with the knowledge and skills to safely and efficiently operate an ambulance in both nonemergency and emergency modes

LESSON GOAL: To provide participants with knowledge of the federal, state, and local laws and of how to apply the laws when operating an ambulance

PERFORMANCE OBJECTIVE(S):

- Identify types of laws that apply to ambulance operation
- Identify how specific laws apply to ambulance operation

INSTRUCTIONAL AIDS:

ICON LEGEND (Those used in this lesson are highlighted)					
		Q & A		?	
Appendix	Show Overhead	Question and Answer Period	Use Flipchart	Ask Question	Local Requirements



1. Types of Regulations
2. Policies Working Together
3. Due Regard for Safety
4. True Emergency Situation
5. Negligence
6. Abandonment
7. Good Samaritan Provision
8. Patient's Rights

INSTRUCTIONAL EQUIPMENT:

Overhead projector and screen
Transparencies
Flipchart and markers

APPENDIX:

Appendix A, Job Aid - Area Motor Vehicle Operation Guidelines

Training Tips for: Lesson 2: Legal Aspects of Ambulance Operations

- Tip 1. Use the forms in Appendix A. Get copies of the state and local statutes, county and city ordinances and regulations. Give each participant a copy.
- Tip 2. Develop examples that are appropriate for your organization. Don't leave any doubt as to what is right or wrong. If possible get an attorney or law enforcement official to assist you with preparing the examples for your organization. They could also help in presenting the lesson.
- Tip 3. For most organizations, when in doubt call the dispatcher.
- Tip 4. It may be possible to get some audio tape from the 911 operations center that would have real examples of ambulance crews asking the dispatcher for advice about a specific incident or reporting their actions.

Instructor Notes

Presentation

INTRODUCTION

As an ambulance operator, you are responsible for the safe and efficient transportation of your patients and crew. At the same time, you must look out for the safety of the public. The very nature of your job requires you to work with others during a time of crisis and with this comes certain risks. You need to be aware that at all times while performing your job, you are being held "legally accountable" for your actions.

This lesson highlights some of the legal aspects--laws, issues, and guidelines--surrounding the performance of your duties.

DEFINING THE LAW

Let's first talk about some of the types of regulations covering emergency vehicle operation and how the regulations guide the decisions you make while performing your job.

Types of Regulations

There are several types of regulations that tell us how to conduct emergency vehicle operation. These regulations are for all types of emergency vehicles including ambulances.

Instructor Notes

Presentation

**Types of Regulations 1:****TYPES OF REGULATIONS**

- Constitutional Law
- Statutory Law
- Ordinances
- Rules and Regulations



MODULE 1

Constitutional laws come from the U.S. Constitution. The Constitution guarantees the rights of the individual. These laws explain patients' rights before, during, and after transport.

Statutory laws come from legislative acts. Each state has laws or statutes that tell us how to operate emergency vehicles. The laws vary from state to state. For example, the state Motor Vehicle Code for each state tells us laws about traffic regulations. The code may dictate exceptions to these laws for ambulance operators, such as special procedures for proceeding through red traffic lights or parking in a no parking zone.

Ordinances are guidelines enacted by a governing municipal body or its agent. These guidelines usually include city or county codes. For example, in some cities, the use of bright headlights is not permitted.

Instructor Notes

Presentation

Rules and regulations are guidelines enacted by an agency that have the force of law. The rules and regulations are intended to provide more information about statutory laws. These are often referred to as the organizational policies and procedures or Standard Operating Procedures (SOP). For example, an organization may have specific guidelines about when to use sirens.

Understanding the Regulations

There are things about emergency vehicle operation laws that you need to know. You need to know how the laws work and when you are exempt from doing what the law says to do.

With so many regulations telling us how to operate emergency vehicles, you must know which law applies in a given situation. You may feel like there may be a conflict of policy about how you do your job. Here are some suggested guidelines for EMS ambulance operators:

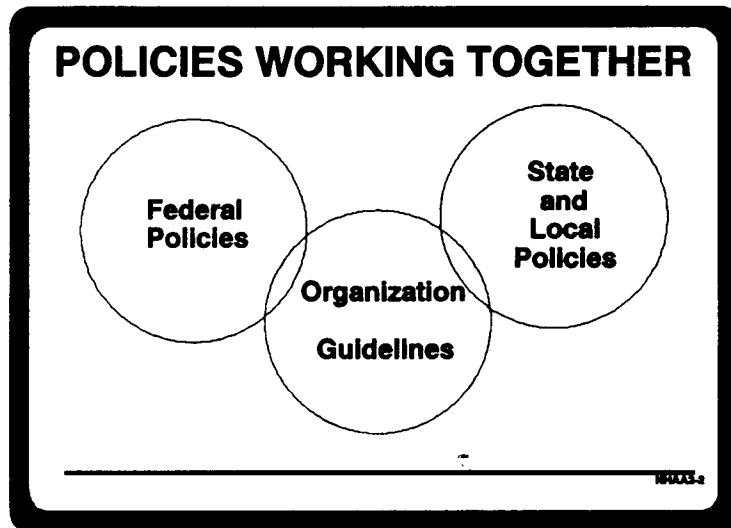
All organizational policy should incorporate the principles of state laws, local ordinances, rules, and regulations into guidelines for the ambulance operator.

Instructor Notes

Presentation



Policies Working Together



This means that all organizational policies and procedures should include and must not contradict federal, state, and local laws concerning the ambulance operation under all conditions. Your organization's policies may be formal or informal, but all policies should be in writing. This can provide protection from liability issues. As an operator, you must know your organization's policies.



Let's see what some of the local policies are concerning ambulance operation. We will discuss what makes up these policies in more detail later in the lesson.

Instructor Notes

Presentation



**local List
organization SOPs
and other guidelines**

There are times when you will be exempt from certain guidelines listed in the regulations. As part of your job, you are required to make decisions concerning the operation of your vehicle. Good training provides you with the knowledge and ability to make appropriate decisions when faced with an emergency situation. Knowing ahead of time what the law says does not apply in the situation is important. Keep the following three principles in mind when approaching the idea of exemptions:

1. Ambulance operators are subject to all traffic regulations unless a specific exemption is made in the state or local statutes.
2. Exemptions are legal only in the emergency mode.
3. Even with an exemption, operators can be found criminally or civilly liable if involved in a crash.

Some examples of exemptions to laws include proceeding through red lights/stop signs at controlled intersections, parking in a no parking zone, or violating traffic flow and turning procedures.

Q&A

What is meant by "specific exemption"?

Instructor Notes

Presentation

[Answer: A specific exemption is a statement which appears in the statutes and specifies an exception to the rule such as: "The operator of an authorized emergency vehicle may park in a no parking zone as long as the operator does not endanger life or property."]

Scenario

Have the participants read the scenario and write their response. Discuss responses as a group.

Let's apply what we have just learned about the types of laws and exemptions to the laws.

Your state has a specific exemption for emergency vehicles proceeding through an intersection with a red signal light or stop sign. The exemption reads, "Emergency vehicles may proceed through an intersection with a red light signal or stop sign if the vehicle is brought to a complete stop, proper clearance is observed, and the vehicle proceeds through the intersection with caution."

During a run, you are following behind another emergency vehicle responding to an emergency call. You are approaching the intersection when you notice a red light. The other emergency vehicle stops, checks to see the intersection is clear, and then proceeds through the intersection. You then follow right behind the other vehicle through the light. Was your action within the law? Why?

Instructor Notes

Presentation

[Answer: No. Even though the first vehicle did meet the requirements of the law, your vehicle must also come to a complete stop, check for proper clearance, and then proceed with caution. No two emergency vehicles may proceed through the intersection at one time.]

Appendix I Test/Answer Key

MODULE A TEST
Ambulance Operation: The Basics

DIRECTIONS: Read each test item. Select the response which best answers the question or completes the statement.

1. Driving to an emergency scene, the ambulance operator approaches a controlled intersection with a red light. The operator stops at the red light, checks for clearance, and then proceeds through the light with caution. Which law is the operator complying with?
 - A. True Emergency
 - B. Negligence
 - C. Abandonment
 - D. Due Regard for Safety

2. An ambulance operator just arrived at the scene of a medical emergency. Which of the following describes the appropriate communication action the operator should take?
 - A. No radio report required
 - B. Dispatch, Unit 42; we've arrived at the scene
 - C. Dispatch, 42; our 10-20 is the accident scene
 - D. Harry, you there? This is Bob; uh! we're here; we'll call when we leave

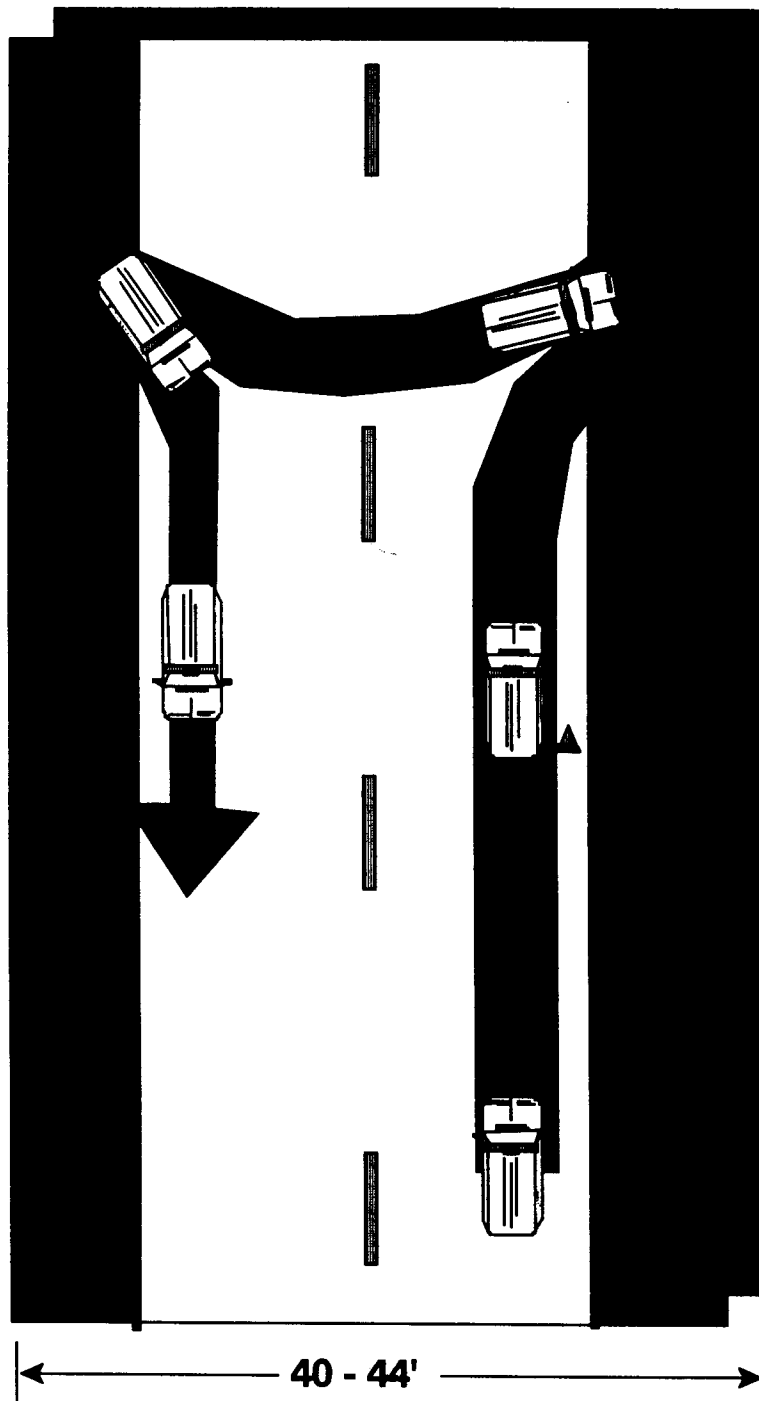
3. What would be the effect of putting too many people into the ambulance?
 - A. If maximum payload is exceeded, the operator will have to prepare a written report on the circumstances
 - B. Would increase momentum which would make stopping vehicle more difficult
 - C. Would have no effect as long as the EMT has sufficient room to continue basic life support on the patient
 - D. Would have no effect because ambulance engine has sufficient horsepower

4. Which inspections and maintenance is the Ambulance Operator responsible for performing?
 - A. Operator not responsible for inspecting or maintaining vehicle
 - B. Full check and preventive maintenance
 - C. Quick check, full check, and maintenance for which the operator has been trained and authorized to perform
 - D. Quick check and that maintenance which is required during a run

5. A multi-car crash has been reported. The primary consideration in selecting a route to the scene is--
 - A. speed
 - B. safety
 - C. directions given by reporting party
 - D. destination medical facility

6. When driving defensively and following the 2-4-12 rule, the operator will--
 - A. be confident that all other drivers see the light and hear the siren and grant the operator the right of way
 - B. maintain safety cushion around ambulance and drive 12 seconds ahead of the vehicle
 - C. maintain 12 second spacing behind vehicle in front
 - D. maintain two car lengths between the ambulance and the car ahead when in the city and four car lengths when on a interstate highway

Three-Point Turn



Three-Point Turn

Purpose:

To develop the coordination of acceleration, turning, judgment of road width, and signaling.

Procedure:

Check traffic. When clear, brake and turn to come to stop with front wheels on right shoulder. Begin backing and turning steering wheel to left. Stop when rear wheels are on left shoulder. Steer to the right and begin to accelerate. Move into right lane and continue forward.

Instructor:

1. Explains purpose of exercise and key factors of the exercise.
2. Demonstrates exercise at moderate speed.
3. Demonstrates exercise at required speed.

Participant:

1. Assumes proper driving position; seat, mirrors, seat belt.
2. Enters course at speed determined by instructor.
3. Checks rear traffic and signals for a stop at least 100 feet in advance.
4. Brings vehicle to a stop at approximately a 15-degree angle from the center of the road.
5. Begins backing turning the wheel slowly for the first 5 feet.
6. Steers counter clockwise until rear wheels barely hit the shoulder.
7. Moves forward into the right lane.
8. Negotiates the course smoothly.
9. Keeps steering movements constant and even.
10. Maintains 9 - 3 hand position.
11. Exits the course at the direction of the instructor.

Three-Point Turn Exercise Rating

Participant's name _____ Date _____ Vehicle make/number _____

		<u>Practice Exercises</u>			
		1	2	3	4
A.	Entered course correctly.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B.	Maintained required speed.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C.	9 - 3 hand position (going forward).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D.	Controlled acceleration.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E.	Steering control.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F.	Accelerator, steering coordination....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G.	Smooth acceleration.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H.	Foot movement.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I.	Use of brakes.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J.	Signaled intention.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
K.	Checked mirror.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
L.	Turned head.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Number of cones hit _____

Reaction time was adequate. YES NO

Vehicle remained under control at all time. YES NO

Describe negative actions or attitudes.

Failed to complete exercise because _____

All requirements were met. YES NO

GENERAL REMARKS:

Instructor's signature _____ Date _____

I have seen the completed form and have been given an explanation of my performance and rating.

Participant's signature _____ Date _____

OBJECTIVES

OBJECTIVES LEGEND

C = Cognitive P = Psychomotor A = Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-2.1 Summarize the reasons for forming a general impression of the patient.(C-1)
- 3-2.2 Discuss methods of assessing altered mental status.(C-1)
- 3-2.3 Differentiate between assessing the altered mental status in the adult, child and infant patient.(C-3)
- 3-2.4 Discuss methods of assessing the airway in the adult, child and infant patient.(C-1)
- 3-2.5 State reasons for management of the cervical spine once the patient has been determined to be a trauma patient.(C-1)
- 3-2.6 Describe methods used for assessing if a patient is breathing.(C-1)
- 3-2.7 State what care should be provided to the adult, child and infant patient with adequate breathing.(C-1)
- 3-2.8 State what care should be provided to the adult, child and infant patient without adequate breathing.(C-1)
- 3-2.9 Differentiate between a patient with adequate and inadequate breathing.(C-3)
- 3-2.10 Distinguish between methods of assessing breathing in the adult, child and infant patient.(C-3)
- 3-2.11 Compare the methods of providing airway care to the adult, child and infant patient.(C-3)
- 3-2.12 Describe the methods used to obtain a pulse.(C-1)
- 3-2.13 Differentiate between obtaining a pulse in an adult, child and infant patient.(C-3)
- 3-2.14 Discuss the need for assessing the patient for external bleeding.(C-1)
- 3-2.15 Describe normal and abnormal findings when assessing skin color.(C-1)
- 3-2.16 Describe normal and abnormal findings when assessing skin temperature.(C-1)
- 3-2.17 Describe normal and abnormal findings when assessing skin condition.(C-1)

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Lesson 3-2: Initial Assessment

- 3-2.18 Describe normal and abnormal findings when assessing skin capillary refill in the infant and child patient.(C-1)
- 3-2.19 Explain the reason for prioritizing a patient for care and transport.(C-1)

AFFECTIVE OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-2.20 Explain the importance of forming a general impression of the patient.(A-1)
- 3-2.21 Explain the value of performing an initial assessment.(A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this lesson, the EMT-Basic student will be able to:

- 3-2.22 Demonstrate the techniques for assessing mental status.(P-1,2)
- 3-2.23 Demonstrate the techniques for assessing the airway.(P-1,2)
- 3-2.24 Demonstrate the techniques for assessing if the patient is breathing.(P-1,2)
- 3-2.25 Demonstrate the techniques for assessing if the patient has a pulse.(P-1,2)
- 3-2.26 Demonstrate the techniques for assessing the patient for external bleeding.(P-1,2)
- 3-2.27 Demonstrate the techniques for assessing the patient's skin color, temperature, condition and capillary refill (infants and children only).(P-1,2)
- 3-2.28 Demonstrate the ability to prioritize patients.(P-1,2)

PREPARATION

Motivation: The EMT-Basic will encounter patients who require emergency medical care. It is important for the EMT-Basic to identify those patients who require rapid assessment critical interventions, and immediate transport.

Following the initial assessment, the EMT-B will use information obtained during this phase with the appropriate history and physical examination.

Prerequisites: BLS, Preparatory, and Airway.

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to patient assessment. The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meet the needs of the program. Materials

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should be edited to assure the objectives of the curriculum are met.

EMS Equipment: Exam gloves, airway management equipment.

PERSONNEL

Primary Instructor: One EMT-Basic instructor knowledgeable in patient assessment.

Assistant Instructor: The instructor-to-student ratio should be 1:6 for psychomotor skill practice. Individuals used as assistant instructors should be knowledgeable about patient assessment.

Recommended Minimum
Time to Complete: One hour

PRESENTATION

Declarative (What)

- I. General Impression of the Patient
 - A. Definition
 1. The general impression is formed to determine priority of care and is based on the EMT-Basic's immediate assessment of the environment and the patient's chief complaint.
 2. Determine if ill, i.e., medical or injured (trauma). If injured, identify mechanism of injury.
 3. Age
 4. Sex
 5. Race
 - B. Assess patient and determine if the patient has a life threatening condition.
 1. If a life threatening condition is found, treat immediately.
 2. Assess nature of illness or mechanism of injury.
- II. Assess Patient's Mental Status. Maintain Spinal Immobilization if Needed.
 - A. Begin by speaking to the patient. State name, tell the patient that you are an emergency medical technician, and explain that you are here to help.
 - B. Levels of mental status
 1. Alert
 2. Responds to Verbal stimuli.
 3. Responds to Painful stimuli.
 4. Unresponsive - no gag or cough

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- III. Assess the Patient's Airway Status.
 - A. Responsive patient - Is the patient talking or crying?
 - 1. If yes, assess for adequacy of breathing.
 - 2. If no, open airway.
 - B. Unresponsive patient - Is the airway open?
 - 1. Open the airway. Positioning is patient, age, and size specific.
 - a. For medical patients, perform the head-tilt chin-lift.
 - (1) Clear
 - (2) Not clear - Clear the airway.
 - b. For trauma patients or those with unknown nature of illness, the cervical spine should be stabilized/immobilized and the jaw thrust maneuver performed.
 - (1) Clear
 - (2) Not clear - Clear the airway.
- IV. Assess the Patient's Breathing.
 - A. If breathing is adequate and the patient is responsive, oxygen may be indicated.
 - B. All responsive patients breathing < 24 breaths per minute or < 8 breaths per minute should receive high flow oxygen (defined as a 15 LPM nonrebreather mask).
 - C. If the patient is unresponsive and the breathing is adequate, open and maintain the airway and provide high concentration oxygen.
 - D. If the breathing is inadequate, open and maintain the airway, assist the patient's breathing and utilize ventilatory adjuncts. In all cases oxygen should be used.

- E. If the patient is not breathing, open and maintain the airway and ventilate using ventilatory adjuncts. In all cases oxygen should be used.
- V. Assess the Patient's Circulation.
 - A. Assess the patient's pulse.
 - 1. The circulation is assessed by feeling for a radial pulse.
 - a. In a patient one year old or less, palpate a brachial pulse.
 - b. If no radial pulse is felt, palpate carotid pulse.
 - (1) If pulseless, medical patient > 12 years old, start CPR and apply automated external defibrillator (AED).
 - (2) Medical patient < 12 years old, start CPR.
 - (3) Trauma patient, start CPR.
 - B. Assess if major bleeding is present. If bleeding is present, control bleeding.
 - C. Assess the patient's perfusion by evaluating skin color and temperature.
 - 1. The patient's skin color is assessed by looking at the nail beds, lips and eyes.
 - a. Normal - pink
 - b. Abnormal conditions
 - (1) Pale
 - (2) Cyanotic or blue-gray
 - (3) Flushed or red
 - (4) Jaundice or yellow
 - 2. Assess the patient's skin temperature by feeling the skin.
 - a. Normal - warm
 - b. Abnormal skin temperatures
 - (1) Hot
 - (2) Cool
 - (3) Cold
 - (4) Clammy - cool & moist
 - 3. Assess the patient's skin condition. This is an assessment of the amount of moisture on the skin.
 - a. Normal - dry
 - b. Abnormal - moist or wet
 - 4. Assess capillary refill in infant and child patients.
 - a. Normal capillary refill is less than two seconds.
 - b. Abnormal capillary refill is greater than two seconds.
- VI. Identify Priority Patients.
 - A. Consider:
 - 1. Poor general impression
 - 2. Unresponsive patients - no gag or cough
 - 3. Responsive, not following commands
 - 4. Difficulty breathing

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5. Shock (hypoperfusion)
 6. Complicated childbirth
 7. Chest pain with BP < 100 systolic
 8. Uncontrolled bleeding
 9. Severe pain anywhere
- B. Expedite transport of the patient. Consider ALS back up.
- VII. Proceed to the appropriate focused history and physical examination.
-

APPLICATION

Procedural (How)

1. Review airway patency, breathing and oxygen delivery.
2. Review methods of assessing mental status.
3. Demonstrate obtaining radial, carotid, and brachial pulses.
4. Show assessment and control of major external bleeding.
5. Demonstrate assessment of skin color, temperature and capillary refill.

Contextual (When, Where, Why)

Perform initial assessment on all patients after assuring scene and personal safety. If the scene is safe and the environment permits, perform the assessment prior to moving the patient. The initial assessment is a rapid means of assessing patient condition and priorities of care.

STUDENT ACTIVITIES

Auditory (Hear)

1. Students should hear recordings of various patient situations to listen for clues concerning the general impression.
2. Students should hear normal and abnormal airway noises.
3. Students should hear breathing.

Visual (See)

1. Students should see audio-visual aids or materials of various patients situations.
2. Students should see breathing while an initial assessment is being performed.
3. Students should see appropriate landmarks for assessing pulses.
4. Students should see examples of major bleeding.
5. Students should see normal skin color and condition.
6. Students should see how to control major bleeding.
7. Students should see the flow chart from Appendix I.

Kinesthetic (Do)

1. Students should practice establishing mental status on programmed patients (fellow students) with various altered mental statuses.
2. Students should practice airway opening techniques on manikins and each other.
3. Students should practice assessing breathing.
4. Students should practice assessing pulses.
5. Students should practice assessing for major bleeding.
6. Students should practice assessing skin color, temperature and condition.
7. Students should practice assessing capillary refill.
8. Students should practice recording assessment findings.
9. Students should use the flow chart from Appendix I.

INSTRUCTOR ACTIVITIES

Supervise student practice.

Reinforce student progress in cognitive, affective, and psychomotor domains.

Redirect students having difficulty with content (complete remediation forms).

EVALUATION

Written: Develop evaluation instruments, e.g., quizzes, verbal reviews, handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-Basic students during role play, practice or other skill stations to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

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REMEDIATION

Identify students or groups of students who are having difficulty with this subject content.
Complete remediation sheet from the instructor's course guide.

ENRICHMENT

What is unique in the local area concerning this topic? Complete enrichment sheets from the instructor's course guide and attach with lesson plan.

APPENDIX G

The following remediation sheet should be completed after every class for individual students or groups of students having difficulty with knowledge, skills, and/or attitude. The primary instructor or an assistant instructor should work with the individual or group as soon as possible to assure that they achieve success in the program.

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Appendix G

EMT-Basic National Standard Curriculum
Remediation Sheet

Date:	Student:
Area of Difficulty:	
Action Plan:	
Completed:	

Date:	Student:
Area of Difficulty:	
Action Plan:	
Completed:	

Date:	Student:
Area of Difficulty:	
Action Plan:	
Completed:	

APPENDIX F

The following enrichment lesson sheets should be copied and used as needed to assist with augmenting the core curriculum.

These sheets are designed to be used as a template to assure that added materials may be presented in similar format and style to the other lessons. These sheets may be added to any of the lessons in the core curriculum.

OBJECTIVES

OBJECTIVES LEGEND

C = Cognitive P = Psychomotor A = Affective

1 = Knowledge level

2 = Application level

3 = Problem-solving level

COGNITIVE OBJECTIVES

At the completion of this lesson, the EMT-B student will be able to:

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•

•

AFFECTIVE OBJECTIVES

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•

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PSYCHOMOTOR OBJECTIVES

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•

•

PREPARATION

Motivation:

Prerequisites:

MATERIALS

AV Equipment: Utilize various audio-visual materials relating to the _____ . The continuous design and development of new audio-visual materials relating to EMS requires careful review to determine which best meets the needs of the program. Materials should be edited to assure the objectives of the curriculum are met.

EMS Equipment:

PERSONNEL

Primary Instructor:

Assistant Instructor:

Recommended Minimum

Lesson Plan Development

Reference 10-3

Time to complete:

PRESENTATION

Declarative (What)
(Usually in outline form)

APPLICATION

Procedural (How)

- 1.
- 2.
- 3.

Contextual (When, Where, Why)

- 1.
- 2.
- 3.

STUDENT ACTIVITIES

Auditory (Hear)

- 1.
- 2.
- 3.

Visual (See)

- 1.
- 2.
- 3.

Kinesthetic (Do)

- 1.
- 2.
- 3.

INSTRUCTOR ACTIVITIES

Supervise student practice.

Reinforce student progress in cognitive, affective, and psychomotor domains.

Redirect students having difficulty with content (complete remediation forms).

EVALUATION

Written: Develop evaluation instruments e.g. quiz, oral reviews, and handouts, to determine if the students have met the cognitive and affective objectives of this lesson.

Practical: Evaluate the actions of the EMT-B students during the role play, practice or other skill stations, to determine their compliance with the cognitive and affective objectives and their mastery of the psychomotor objectives of this lesson.

REMEDIATION

Identify students or groups of students that are having difficulty with this subject content. Complete remediation sheet from the instructor's guide.

STUDENT PRESENTATION EVALUATION FORM

Presenter: _____

Subject: _____

Strongly Agree	Agree	Disagree	Strongly Disagree

1. Lesson objectives were made clear to students
2. Lesson introduction created interest and established the need to know
3. All needed supplementary teaching/learning items were ready and organized
4. Instructor maintained proper position for all students to see presentation
5. Aids were well-planned, well-developed, and used appropriately
6. Vocabulary was at appropriate level
7. The instructor regularly checked with students to see if they were on target
8. Information was presented in an organized format
9. Skill demonstration was presented in a logical step-by-step sequence
10. Appropriate teaching method(s) was (were) selected
11. The instructor's delivery was poised, effective and geared to the topic
12. Instructor stayed on the subject
13. Summation and closure were effective
14. Lesson was too long ()
too short () for content
15. What were this instructor's strengths?
16. Where might this instructor improve?

EMS Instructor Training Program—End of Lesson Evaluation

Name of lesson: _____

1. Please rate the following by checking the appropriate box.

	EXCELLENT	GOOD	AVERAGE	POOR	VERY POOR
Objectives matched content					
Depth of information					
Sequence of content					
Opportunities for discussion					
Relevance of activities					
Clarity of graphics/visual aids					
Format of Student Guide					
	EXCELLENT	SUFFICIENT	INSUFFICIENT		
Instructor guidance					
Amount of practice					
Number of activities					
	JUST RIGHT	TOO SLOW/LONG	TOO FAST/SHORT		
Pace of training					
Length of the lesson					

2. If you answered poor, very poor, or insufficient to any of the above, please explain why.

3. On the back of this sheet, please feel free to write any other comments you have regarding this lesson.

COURSE EVALUATION

PURPOSE: It is our objective to present a useful and effective training course. You are the final authority on whether that objective has been met. Your completion of this form, therefore, will play an important part in our future planning. Please do not feel bound to limit your remarks to questions on this form. Your comments on any aspect of the course will be appreciated.

Course INSTRUCTOR TRAINING COURSE		Dates				
RESPONSES (Check the response closest to your opinion)		Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
1. Course material was	a. Well organized					
	b. Complete and appropriate					
	c. Readable (printed well)					
2. Audio visual materials were:	a. Related to the course					
	b. Good quality					
	c. Sufficient in number					
3. Course	a. Was a reasonable length					
	b. Was worth recommending to others					
	c. Contributed to my knowledge and skills					
	d. Accomplished announced purpose					
4. Instruction	a. Subject was thoroughly covered					
	b. Course objectives were clear					
	c. Exercises were appropriate					
	d. Time in class was spent effectively					
	e. Participation was encouraged					
5. Classroom	a. Was comfortable					
	b. Included a manageable number of students					
	c. Was appropriate for this course					
6. Instructor	a. Was prepared for class					
	b. Stimulated my interest in subject area					
	c. Made course a worthwhile learning experience					

Remarks

COURSE EVALUATION (Continued)

7. Overall instructor evaluation (Check your opinion)

- | | | | | |
|-----------------------------|------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| a. Knowledge of the subject | <input type="checkbox"/> excellent | <input type="checkbox"/> good | <input type="checkbox"/> fair | <input type="checkbox"/> poor |
| b. Ability to teach | <input type="checkbox"/> excellent | <input type="checkbox"/> good | <input type="checkbox"/> fair | <input type="checkbox"/> poor |
-

8. Would you add or emphasize any subject matter areas in subsequent course sessions?

- ☐ No ☐ Yes, list these areas and give your reasons.

9. Would you delete or de-emphasize any subject-matter areas?

- ☐ No ☐ Yes, list these areas and give your reasons.

10. Other comments. Please provide any comments, either general or specific, that you would like to make relative to this course.

Signature and Title	Organization	Date
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